

#14/IDS whrf 2684
3/26/02
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re the Application of:

MARK C. LIEFER, ET AL.

Application No.: 09/336,933

Filed: June 21, 1999

For: **NULL DEEPENING FOR AN ADAPTIVE
ANTENNA BASED COMMUNICATION**

Art Group: 2684

Examiner: P. Tran

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INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with the duty of disclosure under 37 CFR § 1.56 and in accordance with 37 C.F.R. § 1.97, enclosed is a copy of Information Disclosure Citation Form PTO/SB/08. Copies of the references cited on PTO/SB/08 are enclosed herewith. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

Pursuant to 37 CFR § 1.97(e)(1), it is hereby stated that each item of information contained in the Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Information Disclosure Statement.

Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed as an admission that the information cited in this statement is material to patentability.

If any fees are required, please charge Deposit Account 02-2666. A duplicate copy of the Fee Transmittal is enclosed for this purpose.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: February 22, 2002



Gregory D. Caldwell, Reg. No. 39,926

12400 Wilshire Blvd., 7th Floor
Los Angeles, California 90025
(714) 557-3800

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 to the Patent and Trademark Office on: February 22, 2002.



Mary E. Varinner

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Date

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PTO/SB/17 (11-01)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

FREE TRANSMITTAL
for FY 2002

Patent fees are subject to annual revision.

Complete if Known

Application Number	09/336,933
Filing Date	June 21, 1999
First Named Inventor	Mark C. Liefer
Examiner Name	P. Tran
Group/Art Unit	2684
Attorney Docket No.	15685P024

☐ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$)

METHOD OF PAYMENT (check one)
☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☐ Deposit Account
Deposit
Account
Number

02-2666

Deposit
Account
Name

Blakely, Sokoloff, Taylor & Zafman LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments☐ Charge any additional fee(s) during the pendency of the application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
101	740	201	370	Utility filing fee	
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	
SUBTOTAL (1)					(\$)

2. EXTRA CLAIM FEES

Total Claims = Extra Claims X Fee from below = Fee Paid

Independent Claims = X =

Multiple Dependent =

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
103	18	203	9	Claims in excess of 20	
102	84	202	42	Independent claims in excess of 3	
104	280	204	140	Multiple Dependent claim, if not paid	
109	84	209	42	**Reissue independent claims over original patent	
110	18	210	9	**Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)					(\$)

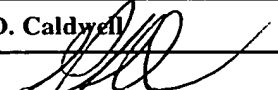
**or number previously paid, if greater, For Reissues, see below

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	50	123	50	Processing fee under 37 CFR 1.17(q)	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	581	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR § 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR § 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	
Other fee (specify) _____					
* Reduced by Basic Filing Fee Paid					
SUBTOTAL (3)					(\$)

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SUBMITTED BY**Complete (if applicable)**

Name (Print/Type)	Gregory D. Caldwell	Registration No. (Attorney/Agent)	39,926	Telephone	(714) 557-3800
Signature		Date	02/22/02		

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

2

Complete if Known

Application Number	09/336,933
Filing Date	June 21, 1999
First Named Inventor	Mark C. Liefer
Group Art Unit	2684
Examiner Name	P. Tran
Attorney Docket Number	15685P024

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

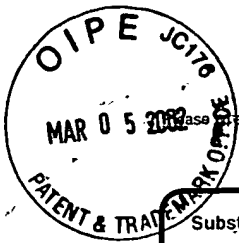
[illegible]

Examiner Signature		Date Considered	
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*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

*Unique citation designation number. *See attached Kinds of U.S. Patent Documents. *Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). *For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet 2 of 2

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First Named Inventor	Mark C. Liefer
Group Art Unit	2684
Examiner Name	P. Tran
Attorney Docket Number	15685P024

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	1	Farsakh et al., "A REAL TIME DOWNLINK CHANNEL ALLOCATION SCHEME FOR AN SDMA MOBILE RADIO SYSTEM," IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, Vol. 3, 10/18/96, pgs. 1215-1220.	
	2	Farsakh et al., "CHANNEL ALLOCATION AND DOWNLINK BEAMFORMING IN AN SDMA MOBILE RADIO SYSTEM," PIMRC '95, Wireless: Merging onto the Information Superhighway, 6th IEEE International Symposium on Toronto, Ont., Canada, 9/27-29/95, pgs. 687-691.	
	3	Gerlach et al., "BASE STATION TRANSMITTER ANTENNA ARRAYS WITH MOBILE TO BASE FEEDBACK," IEEE Asilomar Conference on Signals, Systems & Computers, 1993, pgs. 1432-1436.	

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*Unique citation designation number. †Applicant is to place a check mark here if English language Translation is attached.

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